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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,791	12/06/2001	Matti Lehtimaki	915.407	9904

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EXAMINER	
LEVITAN, DMITRY	
ART UNIT	PAPER NUMBER
2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/006,791	LEHTIMAKI ET AL.	
	Examiner	Art Unit	
	Dmitry Levitan	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 July 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-9,11-27 and 29-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3, 5-9, 11-27 and 29-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Amendment, filed 006/24/06, has been entered. Claims 1-3, 5-9, 11-27 and 29-33 remain pending.

Claim Rejections - 35 USC § 103

1. Claims 1-3, 5-9, 11-14, 19, 21-25, 27 and 29-33, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien (US 6,463,055).

1. Regarding claims 1-3, 11, 21-23, 27 and 31, Lupien teaches a network, a method, a gateway and an apparatus comprising:

A telecommunication network (integrated network on Fig. 5, according to the fourth embodiment 20:47-60, as the commonly used network elements are disclosed in detail for the first embodiment on Fig. 2 and 18:21-37) having at least one radio access network (cellular network ANSI-41 and radio network, comprising base station 49 and mobile end system 51 on Fig. 5, 20:55-60 and GPRS-VLR IWF 37), a core network (General Packet Radio Service, GPRS network, comprising packet data network 34 on Fig. 2 and 5, and 20:61-65), comprising a gateway device (SGSN 32 and GGSN 33 on Fig. 2 and 5, 20:61-65) and a network control device (service node SGSN 35 on Fig. 2 and 5), and at least one terminal device (terminal device 52 on Fig. 5 and inherently part of ANSI-41 network on Fig. 5),

Wherein said core network comprises at least one gateway device, located within the core network (SGSN 32 and GGSN 33 on Fig. 5 and 20:62-65), and at least one network control device configured to provide call setup and call control functions (service node SGSN 35 on Fig. 2 and 18:47-52, wherein SGSN 35, as an old SGSN, provides call setup messages 65 to the new SGSN 32, as shown on Fig. 6 and 24:23-48) and configured to control said at least one gateway

device by transmitting a control information to the gateway device (SGSN 35 controls identification procedure of gateway SGSN 32),

Wherein said radio access network is directly connected to the gateway device via a first interface (interface between SGSN 32 and radio network: Gs-Gd to GPRS-VLR 37, and Gz to BS 49 as shown on Fig. 5),

Wherein a second interface, located within the core network, is connected between the access network control device and the gateway device, the control information being transmitted from the access network control device and the gateway device via said second interface (Interface Gn between SGSN 32 and SGSN 35 on Fig. 5); and

Wherein said telecommunication network is adapted to route user data directly, without being transmitted through the network control device, between said radio access network and said at least one gateway device via said first interface (routing data through SGSN 32 and GGSN 33 to the packet data network 34 as shown on Fig. 5), and

Wherein the conversion between audio signals carried on telephone circuits and data packets carried over the Internet or other packet networks is provided (providing conversion between audio signals of cellular network ANSI-41 and data packets to be carried over packet data network 34, as shown on Fig. 5 and 2:14-19).

Lupien does not teach to perform conversion between audio signals carried on telephone circuits and data packets carried over Internet at the gateway.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to perform conversion between audio signals carried on telephone circuits and data

packets carried over Internet at the gateway, to reduce cost of the system by collocating the conversion unit with the gateway.

In addition regarding claims 21-23, Lupien teaches using network control device /SGSN 35 in the authorization process to identify valid mobile equipment, wherein mobile equipment inherently transmits control information for authorization including user's data through the first interface, connecting the access radio network to the gateway.

In addition, regarding claim 31, Lupien teaches first means as the first interface and second means as the second interface, as disclosed in the rejection of claim 1 above.

2. Regarding claims 5, 6, 29, 30, 32 and 33, Lupien teaches user data as real-time speech and audio (cellular based telephones, wherein data is real-time speech/voice 2:20-25).

3. Regarding claims 12 and 13, Lupien teaches the packet network as an ATM and IP network (ATM and IP networks 1:45-50).

4. Regarding claim 7, Lupien teaches all the limitations of parent claims 1, 5 and 6.

Lupien does not teach using RTP protocol.

Official notice is taken that RTP protocol is well known and used for real time speech transmission.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using RTP protocol to the system of Lupien improve the system compatibility with devices using popular RTP protocol.

5. Regarding claims 8, 9, 14, 24 and 25, Lupien teaches all the limitations of parent claims 1 and 21.

Lupien does not teach using ISUP, MGCP or TDM protocols for second interface.

Official notice is taken that ISUP, TDM and MGCP protocols are well known and used for transmitting data in telecommunication networks.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using ISUP, TDM or MGCP protocols to the system of Lupien to improve the system compatibility with devices using popular ISUP, TDM or MGCP protocols.

6. Regarding claim 19, Lupien teaches all the limitations of parent claim 1.

Lupien does not teach using access network control unit being part of a Mobile Switching Center.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add access network control unit to a Mobile Switching Center to reduce cost of the system by collocating access network control unit with a Mobile Switching Center.

7. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien in view of Zheng (US 5,745,477).

Lupien teaches all the limitations of parent claim 1, including packet networks as ATM and IP.

Lupien does not teach using packet networks for transmitting control information.

Zheng teaches using packet or ATM networks for transmitting control information (using RM cells to transmit control information 2:1-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using packet networks for transmitting control information of Zheng to the system of Lupien to utilize well known control delivery method to make the system compatible with numerous available ATM and IP devices.

8. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien in view of Admitted prior art.

Lupien teaches all the limitations of parent claim 1.

Lupien does not teach telecommunication network as UMTS network.

Admitted prior art teaches telecommunication network as UMTS network (Specification, Background of the invention, 2:3-6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add new UMTS telecommunication network standard of Admitted prior art to the system of Lupien to utilize new features of well known standard.

9. Claims 20 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien in view of UMTS 23.01 V 1.0.0 (1998-09) standard.

Lupien teaches all the limitations of parent claim 1.

Lupien does not teach using Iu as the first interface.

UMTS standard teaches using Iu interface between access and core network domains (Iu interface, shown on Fig. 1 and page 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add Iu interface of UMTS telecommunication network standard to the system of Lupien to utilize new features of well known standard and make the system compatible with other UMTS devices.

Response to Arguments

10. Applicant's arguments with respect to claims 1-3, 5-9 and 11-33 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on (571) 272-7529. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dmitry Levitan
Examiner
Art Unit 2616